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CLAIMS

[c1]   1.   In a controller, a method for putting an inactive net in a group communication network into a dormant mode, the method comprising:

determining whether the net has been inactive for a predetermined time period; and

causing the net to enter the dormant mode if it is determined that the net has been inactive for the predetermined time period.

[c2]   2.   The method of claim 1, wherein the causing includes ordering each participating communication device in the net to release its air-traffic channel.

[c3]   3.   The method of claim 2 further including:

maintaining sufficient connection for each participating communication device in the net for sending an out-of-dormant command.

[c4]   4.   The method of claim 2, wherein each participating communication device may ignore a go-dormant order.

[c5]   5.   The method of claim 1, further including:

causing a new communication device attempting to participate in the net to enter the dormant mode.

[c6]   6.   The method of claim 1, further including:

informing each participating communication device in the net that the net is put in the dormant mode.

[c7]   7.   In a controller, a method for bringing a net in a group communication network out of a dormant mode, the method comprising:

receiving a floor-control request from a participating communication device in the net; and

bringing the net out of the dormant mode if the request is granted.

[c8]   8.   The method of claim 7, wherein the bringing the net out of the dormant mode includes sending wake-up commands to participating communication devices in the net before bringing the net out of the dormant mode.

[c9]   9.   The method of claim 8, further including:

receiving responses to the wake-up commands from a number of participating communication devices in the net before bringing the net out of the dormant mode; and

bringing the net out of the dormant mode if the number exceeds a predetermined threshold number.

[c10]   10.   The method of claim 9, further including:

un-registering communication devices that fail to respond to the wake-up requests within a predetermined time period.

[c11]   11.   The method of claim 10, further including:

re-registering a communication device that later asks to re-join the net.

[c12]   12.   The method of claim 8, further including:

bringing the net out of the dormant mode after a predetermined time period following sending the wake-up requests.

[c13]   13.   The method of claim 7, further including:

buffering information received from the participating communication device before bringing the net out of the dormant mode.

[c14]   14.   The method of claim 7, wherein the receiving includes receiving the floor-control request from a push-to-talk (PTT) device.

[c15]   15.   In a controller, a computer-readable medium embodying a method for putting an inactive net in a group communication network into a dormant mode, the method comprising:

determining whether the net has been inactive for a predetermined time period; and

causing the net to enter the dormant mode if it is determined that the net has been inactive for the predetermined time period.

[c16]   16.   In a controller, a computer-readable medium embodying a method for bringing a net in a group communication network out of a dormant mode, the method comprising:

receiving a floor-control request from a participating communication device in the net; and

bringing the net out of the dormant mode if the request is granted.

[c17]   17.   A controller for bringing a net in a group communication network out of a dormant mode, comprising:

means for receiving a floor-control request from a communication device in the net; and

means for bringing the net out of the dormant mode if the request is granted.

[c18]   18.   A controller for putting a net in a group communication network into a dormant mode, comprising:

means for determining whether the net has been inactive for a predetermined time period; and

means for causing the net to enter the dormant mode if it is determined that the net has been inactive for the predetermined time period.

[c19]   19.   A controller for putting an inactive net in a group communication network into a dormant mode, comprising:

a receiver to receive information over the network;

a transmitter to transmit information over the network; and

a processor communicatively coupled to the receiver and the transmitter, the processor being capable of:

determining whether the net has been inactive for a predetermined time period; and

causing the net to enter the dormant mode if it is determined that the net has been inactive for the predetermined time period.

[c20]   20.   A controller for bringing a net in a group communication network out of a dormant mode, comprising:

a receiver to receive information over the network;

a transmitter to transmit information over the network; and

a processor communicatively coupled to the receiver and the transmitter, the processor being capable of:

receiving a floor-control request from a participating communication device in the net; and

bringing the net out of the dormant mode if the request is granted.

[c21]   21.   In a controller, a method for putting an inactive communication device in a group communication network into a dormant mode, the method comprising:

determining whether the communication device has been inactive for a predetermined time period; and

causing the communication device to enter the dormant mode if it is determined that the communication device has been inactive for the predetermined time period.

[c22]   22.   The method of claim 21, wherein the causing includes ordering the communication device to release its air-traffic channel.

[c23]   23.   The method of claim 22 further including:

maintaining sufficient connection for the communication device for sending an out-of-dormant command.

[c24]   24.   The method of claim 22, wherein the communication device may ignore a go-dormant order.

[c25]   25.   In a controller, a method for bringing a communication device in a group communication network out of a dormant mode, the method comprising:

receiving a floor-control request; and

bringing the communication device out of the dormant mode if the request is granted.